CHIRICAHUA LEOPARD FROG
(*Lithobates* [*Rana*] *chiricahuensis*)

STATUS: Threatened (67 FR 40790, June 13, 2002) without critical habitat.

SPECIES DESCRIPTION: Distinctive pattern on the rear of the thigh consisting of small, raised, cream-colored spots or tubercles on a dark background; dorsolateral folds that are interrupted and deflected medially; stocky body proportions; relatively rough skin on the back and sides; and often green coloration on the head and back. The species also has a distinctive call consisting of a relatively long snore of 1 to 2 seconds in duration. Snout-vent lengths of adults range from approximately 54 to 120 mm (2.1 to 4.7 in). Leopard frogs from the eastern slope of the Huachuca Mountains in Cochise County, Arizona, were described as the Ramsey Canyon leopard frog (*Rana subaquavocalis*), but consensus in the herpetological community is that it is actually a population of the Chiricahua leopard frog. However, until such time that the listing is revised, the Ramsey Canyon leopard frog is not considered listed under the Endangered Species Act. Populations of the Chiricahua leopard frog in central and east-central Arizona and west-central New Mexico (Mogollon Rim form) are disjunct from those in southeastern Arizona, southwestern New Mexico, and Mexico and may represent a distinct species. The name of the genus was recently changed from "*Rana*" to "*Lithobates*".

HABITAT: The Chiricahua leopard frog was historically an inhabitant of cienegas, pools, livestock tanks, lakes, reservoirs, streams, and rivers at elevations of 1,000 to 2,710 m (3,281 to 8,890 ft) in central, east-central, and southeastern Arizona (Santa Cruz, Apache, Gila, Pima, Cochise, Greenlee, Graham, Yavapai, Coconino, and Navajo counties); west-central and southwestern New Mexico; and in Mexico, northeastern Sonora and the Sierra Madre Occidental of northwestern Chihuahua. The Chiricahua leopard frog is now often restricted to springs, livestock tanks, and streams in the upper portions of watersheds where non-native predators either have yet to invade or habitats are marginal. Distribution and habitat use of the Chiricahua leopard frog in Mexico are poorly known.

RANGE: Historical: A total of 298 and 182 historical localities are known for the species in Arizona and New Mexico, respectively. An additional 34 localities are known from Sonora and Chihuahua, Mexico.

Current: The species' current range is similar to its historical range, but the frog is not well-represented in many areas now, and has apparently disappeared from some drainages and mountain ranges. At the time of listing (2002) the frog was likely extant at an estimated 87 and 31-41 localities in Arizona and New Mexico, respectively. As of this writing (February 2008), we estimate the frog is extant at 49 and 30-35 localities in Arizona and New Mexico, respectively; which represents extirpation from 82-84 percent of historical U.S. localities. The status of the 34 collection localities in Mexico is poorly known.

REASONS FOR DECLINE/VULNERABILITY: The most serious threats to this species include predation by non-native organisms, especially bullfrogs, fishes, and crayfish; and an apparently introduced fungal skin disease (chytridomycosis or "Bd") that is killing frogs and toads around the globe. Other threats include drought, floods, wildfires, degradation and destruction of habitat, water diversions and groundwater pumping, disruption of metapopulation dynamics (relationships among populations of frogs), increased chance of extirpation or extinction resulting from small numbers of populations and individuals, and environmental contamination.

LAND MANAGEMENT/OWNERSHIP: San Bernardino and Buenos Aires National Wildlife Refuges; Coconino, Coronado, Gila, Tonto, Apache-Sitgreaves National Forests; Bureau of Land Management; and private land.

NOTES: At listing, a special rule was finalized that exempts from the Section 9 take prohibitions of the ESA incidental take of frogs due to operation and maintenance of livestock tanks on non-federal lands. A

recovery plan was completed in April 2007. Safe Harbor agreements are in place throughout the range of the species in Arizona and southwestern New Mexico.

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